Re: ~~Corcumman - Buffalo~~ Stability eval.

Environmental Protection Agency
Region II - Hazardous Waste Facilities Branch
New York Corrective Action Section

Date 10/13/93

( ) Conrad Simon	( ) Carol Coch
( ) Helen Beggun	( ) Larry D'Andrea
( ) Andrew Bellina	( ) Michael Infurna
( ) Eddie Hernandez	( ) Maria Jon
( ) Tara Williams	( ) Phil Masters
( ) Michael Poetzsch	( ) John Nevius
( ) Barry Tornick	( ) Wilfredo Palomino
( ) Doug Pocze	(✓) Carol Stein
	( ) Alan Straus

Remarks Pls review attached & let's discuss your findings

~~This appears to be an interesting~~ stability eval

( ) Action Comments/Response due by _____
(✓) FYI
( ) Circulate
( ) Return to _____
( ) CS's Signature
( ) See me to discuss by _____

Thanks,

James Reidy, P.E.
Chief, New York Corrective Action Section

275000

JReidy

New York State Department of Environmental Conservation
50 Wolf Road, Albany, New York 12233

Thomas C. Jorling
Commissioner

OCT 5 1993

Mr. James Reidy, P.E.
Chief
New York Corrective Action Section
USEPA Region II
Jacob Javits Federal Plaza
New York, NY 10278

Dear Mr. Reidy:

RE: Grumman Aerospace Corp./Naval Weapons
Industrial Reserve Plant - Bethpage
EPA I.D. No. NYD002047969

Attached please find the Site Stabilization Report for the above facility. Interim Corrective Measures to prevent human exposure to contaminated soil and groundwater have already been performed by both the Navy and the Bethpage Water District, and any additional appropriate stabilization measures would require the same feasibility and comparative selection analysis being explored in the CMS. Therefore, the Department recommends that no further stabilization be required for this facility.

If you have any questions, contact Ms. Kelly Bologna at (518) 457-6072.

Sincerely,

John L. Middelkoop, P.E.
Chief
Bureau of Eastern Hazardous Waste Programs
Division of Hazardous Substances Regulation

Attachments

cc: D. Lucia
K. Bologna

CORRECTIVE ACTION STABILIZATION QUESTIONNAIRE

Completed by: Kelly Bologna, P.E.
Date: September 20, 1993

Background Facility Information

Facility Name: Grumman Aerospace Corp./ Naval Indus. Reserve Plant
EPA Identification No.: NYD002047969
Location (City, State): Bethpage , New York
Facility Priority Rank:

1. Is this checklist being completed for one solid waste management unit (SWMU), several SWMUs, or the entire facility? Explain.

Several SWMUs onNavy property and AOCs.

Also see attached.

Status of Corrective Action Activities at the Facility

2. What is the current status of HSWA corrective action activities at the facility?

( ) No corrective action activities initiated
(X) RCRA Facility Assessment (RFA) or equivalent completed
(X) RCRA Facility Investigation (RFI) completed
( ) Corrective Measures Study (CMS) completed
( ) Corrective Measures Implementation (CMI) begun or completed
( ) Interim Measures begun or completed

3. If corrective action activities have been initiated, are they being carried out under a permit or an enforcement order?

(X) Operating permit
( ) Post-closure permit
( ) Enforcement order

4. Have interim measures, if required or completed [see Question 2], been successful in preventing the further spread of contamination at the facility?

(X) Yes
( ) No
( ) Uncertain; still underway

In an interim remedial action, contaminated soils in the vicinity of samples containing PCBs significantly greater than 50 ppm were covered and flagged to prevent contact and migration of contaminates. Also Bethpage Water District well #6-1 has granulated active carbon treatment for VOC removal.

Also see attached

Facility Releases and Exposure Concerns

5. To what media have contaminant releases from the facility occurred or been suspected of occurring?

(X) Ground water
( ) Surface water
( ) Air
(X) Soils

6. Are contaminant releases migrating off-site?

(X) Yes; Indicate media, concentrations, and level of certainty.

The Bethpage Water District (BWD) potable water supply well(#6-1) contained 240 ppb Trichloroethene.

Also see attached

( ) No

( ) Uncertain

7a. Are humans currently being exposed to contaminants released from the facility?

( ) Yes

(X) No

( ) Uncertain

7b. Is there a potential for human exposure to the contaminants released from the facility over the next five to 10 years?

( ) Yes

( ) No

(X) Uncertain

8a. Are environmental receptors currently being exposed to contaminants released from the facility?

( ) Yes

( ) No

(X) Uncertain

8b. Is there a potential that environmental receptors could be exposed to the contaminants released from the facility over the next five to 10 years?

( ) Yes

( ) No

(X) Uncertain

Anticipated Final Corrective Measures

9. If already identified or planned, would final corrective measures be able to be implemented in time to adequately address any existing or short-term threat to human health and the environment?

(X) Yes

( ) No

( ) Uncertain

Additional explanatory notes:

A Corrective Measures Study is currently being implemented.

10. Could a stabilization initiative at this facility reduce the present or near-term (e.g., less than two years) risks to human health and the environment?

( ) Yes

(X) No

( ) Uncertain

Additional explanatory notes:

Final corrective measures will be implemented within the near-term.

11. If a stabilization activity were not begun, would the threat to human health and the environment significantly increase before final corrective measures could be implemented?

( ) Yes

(X) No

( ) Uncertain

Additional explanatory notes:

Stabilization for soilscontaining PCBs has already occured. No known residential wells in the immediate vicinity of the NWIRP are present. The one BWD well (#6-1) that exceeded drinking water standards is currently under activated carbon treatment for VOC removal.

Technical Ability to Implement Stabilization Activities

12. In what phase does the contaminant exist under ambient site conditions?

(X) Solid
( ) Light non-aqueous phase liquids (LNAPLs)
( ) Dense non-aqueous phase liquids (DNAPLs)
(X) Dissolved in ground water or surface water
( ) Gaseous
( ) Other. _____

13. Are one or more of the following major chemical groupings of concern at the facility?

(X) Volatile organic compounds (VOCs) and/or semi-volatiles
( ) Polynuclear aromatics (PAHs)
( ) Pesticides
(X) Polychlorinated biphenyls (PCBs) and/or dioxins
( ) Other organics
(X) Inorganics and metals
( ) Explosives
( ) Other_____

14. Are appropriate stabilization technologies available to prevent the further spread of contamination, based on contaminant characteristics and the facility's environmental setting? [See Attachment A for a listing of potential stabilization technologies.]

(X) Yes; indicate possible course of action.

see attached

( ) No; indicate why stabilization technologies are not appropriate; then go to Question 19.

15. Has the RFI, or another environmental investigation, provided the site characterization and waste release data needed to design and implement a stabilization activity?

(X) Yes
( ) No

If No, can these data be obtained faster than the data needed to implement the final corrective measures?

( ) Yes
( ) No

Timing and Other Procedural Issues Associated with Stabilization

16. Can stabilization activities be implemented more quickly than the final corrective measures?

( ) Yes
(X) No
( ) Uncertain

Additional explanatory notes:
The CMS Implementation currently underway would parallel an interim stabilization. Also see attached

17. Can stabilization activities be incorporated into the final corrective measures at some point in the future?

( ) Yes
(X) No
( ) Uncertain

Additional explanatory notes:

Conclusion

18. Is this facility an appropriate candidate for stabilization activities?

( ) Yes
( ) No, not feasible
( ) No, not required

Explain final decision, using additional sheets if necessary.

Because interim remedial measures are already in place and Corrective Measures Study is underway it is not recommended that additional measures, prior to Corrective Measures Implementation, be required using the stabilization strategy.

Entering this STABILIZATION MEASURES EVALUATION (CA 225) in RCRIS requires one of the following status codes.

( ) YE: Stabilization required
( ) NR: Stabilization not required
( ) NF: Stabilization not feasible, e.g., technical limitations or site characteristics make stabilization infeasible
( ) IN: Further investigation necessary

SUPPLEMENTAL INFORMATION
CORRECTIVE ACTION STABILIZATION QUESTIONNAIRE
GRUMMAN/NWIRP - BETHPAGE

1.-3. The corrective action required by the facility's RCRA operating permit is currently being carried out by the Navy to parallel the remedial work that Grumman is being required to do on its surrounding property under a Consent Order signed with the Department's Division of Hazardous Waste Remediation.

The Navy is currently implementing a CMS for the following SWMU's and AOC's at the facility:

Site 1: Former Drum Marshalling Area
Site 2: Recharge Basin Area
Site 3: Salvage Storage Area
AOC 1: HN-24 Area
AOC 2: Plant No. 3
AOC 3: Northern Warehouse: Drum Marshalling Area
AOC 4: Offsite Residential Neighborhood

4. As a result of the presence of PCB's in surface soils at a concentration significantly greater than 50 mg/kg, the Navy initiated an interim remedial action to protect human health. A soil cap was placed on these areas to reduce the cancer risk of offsite residents and onsite workers to 1 X 10^{-6} and 1 X 10^{-5}, respectively.

The Bethpage Water District (BWD) operates a line of water supply wells approximately 7500 feet south of NWIRP (well #s 4, 5 and 6). Of these wells, #6 was measured to contain a trichloroethene (TCE) concentration of 240 mg/l (drinking water criteria is less than 5 ug/l). Because of this, the BWD has implemented an interim remedial measure with the installation of granulated active carbon (GAC) treatment for VOC removal.

6. Contaminated groundwater has migrated offsite. A monitoring well program made up of three well clusters (including shallow and deep wells) was installed in the residential neighborhood to the east of the NWIRP to evaluate the horizontal and vertical extent of solvent - contaminated groundwater. Congruently, computer modeling was performed to develop a full range of potential contaminant migration routes based on the

natural site hydrogeology, the pumping of facility production wells as well as BWD public supply wells, and the reinjection of groundwater via facility recharge basins. Based on the offsite monitoring well program, as well the computer modeling results, the shallow groundwater contamination in the offsite neighborhood is limited to areas within approximately 100 feet east of Site 1 but continue on south to near the Long Island Railroad (LIR). Intermediate depth groundwater contamination also extends east and south to the LIR.

Because the BWD potable supply wells to the east and south are at such a distance and the fact that historical pumping scenarios greatly vary, it is uncertain which SWMU's from Navy property, if any, are responsible for the contamination at well #6. ← Q: Is well #6 adjacent to the Navy property?

7a. There are no known residential groundwater wells in the immediate vicinity of the NWIRP and the one BWD well (#6) having concentrations of VOC's above drinking water standards has already undergone an interim remedial measure.

14. Appropriate stabilization measures for soil would be: fixation and/or excavation of PCB's and in-situ vapor extraction of VOC's. Appropriate stabilization for groundwater would include extraction, granulated activated carbon treatment and air stripping (VOC's), and precipitation filtration (inorganics).

15. Any additional stabilization measures that would be appropriate would require the same feasibility and comparative benefit/cost analysis currently being explored in the CMS.

None of the existing measures prevent further migration of contam.

[Navy will need to negotiate with other potential polluters (e.g. Hooker-Ruco).
In the interim, the Navy might consent to consider some stabilizg. measures.